

This listing of claims will replace all prior versions, and listings, of claims in the application:

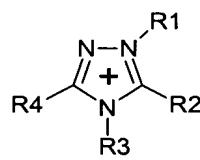
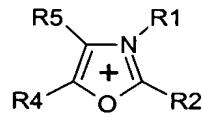
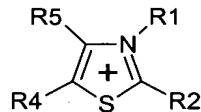
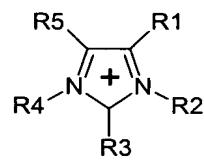
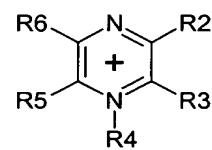
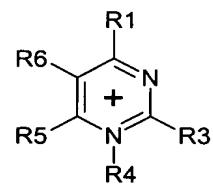
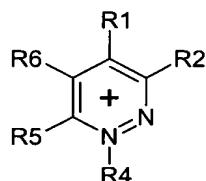
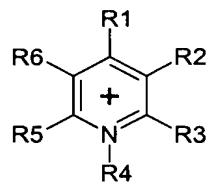
Listing of Claims:

1. (Currently Amended): A compound ~~An ionic liquid~~ of the formula



wherein:

\mathbf{K}^+ is a cation selected from

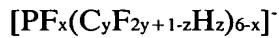


where

\mathbf{R}^1 to \mathbf{R}^6 are identical or different and are each individually

- H,
- halogen,
- an alkyl radical (C₁ to C₈), which is unsubstituted or partially or fully substituted by F, Cl, $\text{N}(\text{C}_n\text{F}_{(2n+1-x)}\text{H}_x)_2$ $\text{N}(\text{C}_n\text{F}_{(2n+1-x)},\text{H}_x)_2$, O(C_nF_(2n+1-x)H_x), or $(\text{C}_n\text{F}_{(2n+1-x)}\text{H}_x)$ $(\text{C}_n\text{F}_{(2n+1-x)},\text{H}_x)$, where 1 < n < 6 and 0 < x ≤ 13,
- a phenyl radical which is unsubstituted or partially or fully substituted by F, Cl, N(C_nF_(2n+1+x)H_x)₂, O(C_nF_(2n+1-x)H_x), SO₂(C_nF_(2n+1-x)H_x) or C_nF_(2n+1-x)H_x where 1 < n < 6 and 0 < x ≤ 13, or
- one or more pairs of adjacent R¹ to R⁶ can also be an alkylene or alkenylene radical having up to 8 C atoms and which is unsubstituted or partially or fully unsubstituted by halogen, N(C_nF_(2n+1x)H_x)₂, O(C_nF_(2n+1-x)H_x), SO₂(C_nF_(2n+1-x)H_x or C_nF_(2n+1-x)H_x where 1 < n < 6 and 0 ≤ x ≤ 13; and

A⁻ is an anion of the following formula



where 1 ≤ x < 6

1 ≤ y ≤ 8 and

0 ≤ z ≤ 2y + 1.

2. (Original): A compound according to claim 1, wherein at least one R¹ to R⁶ group is a halogen.

3. (Currently Amended): A compound according to claim 1, wherein at least one R¹ to R⁶ group is an alkyl radical (C₁ to C₈), which is unsubstituted or partially or fully substituted by F, Cl, $\text{N}(\text{C}_n\text{F}_{(2n+1-x)}\text{H}_x)_2$ $\text{N}(\text{C}_n\text{F}_{(2n+1-x)},\text{H}_x)_2$, O(C_nF_(2n+1-x)H_x), or $(\text{C}_n\text{F}_{(2n+1-x)}\text{H}_x)$ $(\text{C}_n\text{F}_{(2n+1-x)},\text{H}_x)$, where 1 < n < 6 and 0 < x ≤ 13.

4. (Original): A compound according to claim 1, wherein at least one R¹ to R⁶ group is a phenyl radical which is unsubstituted or partially or fully substituted by F, Cl,

$N(C_nF_{(2n+1+x)}H_x)_2$, $O(C_nF_{(2n+1-x)}H_x)$, $SO_2(C_nF_{(2n+1-x)}H_x)$ or $C_nF_{(2n+1-x)}H_x$ where $1 < n < 6$ and $0 < x \leq 13$.

5. (Original): A compound according to claim 1, wherein at least one adjacent pair of R^1 to R^6 is an alkylene or alkenylene radical having up to 8 C atoms and which is unsubstituted or partially or fully unsubstituted by halogen, $N(C_nF_{(2n+1+x)}H_x)_2$, $O(C_nF_{(2n+1-x)}H_x)$, $SO_2(C_nF_{(2n+1-x)}H_x)$ or $C_nF_{(2n+1-x)}H_x$ where $1 < n < 6$ and $0 \leq x \leq 13$.

6. (Original): A compound according to claim 1, wherein said compound has at least one perfluorinated alkyl group.

7. (Original): A compound according to claim 1, wherein said compound contains at least one $C_yF_{2y+1-z}H_z$ group selected from C_2F_5 and C_4F_9 .

8. (Original): An electrochemical cell comprising a cathode, an anode, a separator, and an ionic liquid of claim 1.

9. (Original): A capacitor comprising of at least a pair of electrodes, a separator, and an ionic liquid of claim 1.

10. (Original): An electrolyte composition comprising an ionic liquid of claim 1 and an aprotic solvent.

11. (Original): An electrolyte composition comprising an ionic liquid of claim 1 and a conductive salt.

12. (Previously Presented): A compound according to claim 1, wherein said compound is:

1-ethyl-3-methylimidazolium tris(pentafluoroethyl)trifluorophosphate;
1,2-dimethyl-3-propylimidazolium tris(pentafluoroethyl)trifluorophosphate; or
1-ethyl-3-methylimidazolium tris(nonafluorobutyl)trifluorophosphate.

13. (Previously Presented): A compound according to claim 12, wherein said compound is 1-ethyl-3-methylimidazolium tris(pentafluoroethyl)trifluorophosphate.

14. (Currently Amended): A compound according to claim 1, wherein R¹ to R⁶ are each H or a C₁ to C₈ alkyl, which is unsubstituted or partially or fully substituted by F, Cl, N(C_nF_(2n+1-x)H_x)₂, N(C_nF_(2n+1-x),H_x)₂, O(C_nF_(2n+1-x)H_x), or (C_nF_(2n+1-x)H_x) (C_nF_(2n+1-x),H_x), where 1 < n < 6 and 0 < x ≤ 13.

15. (Previously Presented): A compound according to claim 1, wherein R¹ to R⁶ are each H or a C₁ to C₈ alkyl.

16. (Previously Presented): An electrolyte composition according to claim 11, wherein said conductive salt is LiPF₆, LiBF₄, LiClO₄, LiAsF₆, LiCF₃SO₃, LiN(CF₃SO₂)₂, LiC(CF₃SO₂)₃ or a mixture thereof.

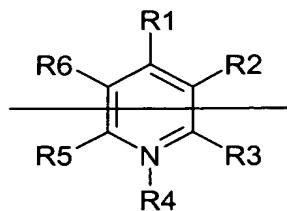
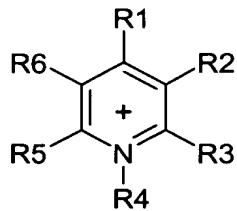
17. (Previously Presented): An electrolyte composition according to claim 11, wherein said composition contains 1-99 wt% of said ionic liquid.

18. (Previously Presented): An electrolyte composition according to claim 11, wherein said composition further contains an organic isocyanate.

19. (Previously Presented): A compound according to claim 1, wherein 2 ≤ y ≤ 8.

20. (Previously Presented): A compound according to claim 1, wherein 1 ≤ z ≤ 2y + 1.

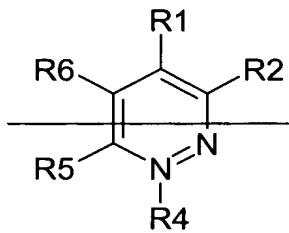
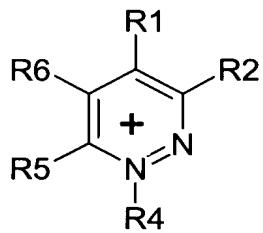
21. (Currently Amended; Withdrawn): A compound according to claim 1, wherein



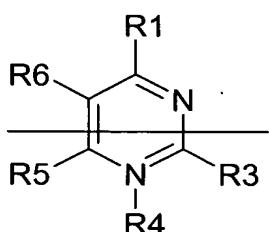
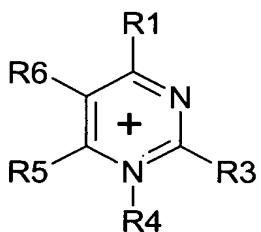
K^+ is

22. (Currently Amended; Withdrawn): A compound according to claim 1, wherein

K^+ is

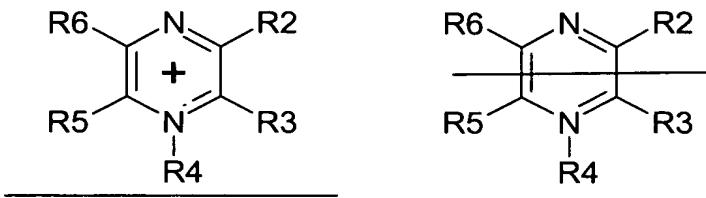


23. (Currently Amended; Withdrawn): A compound according to claim 1, wherein

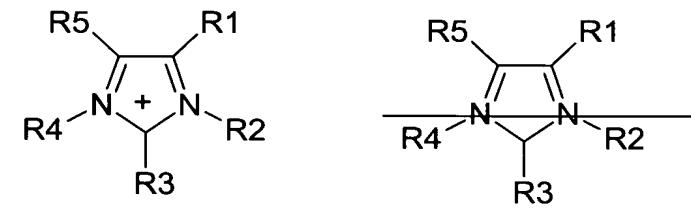


K^+ is

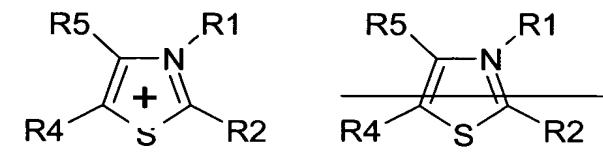
24. (Currently Amended; Withdrawn): A compound according to claim 1, wherein K^+ is



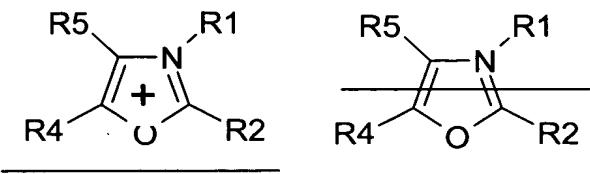
25. (Currently Amended): A compound according to claim 1, wherein K^+ is



26. (Currently Amended; Withdrawn): A compound according to claim 1, wherein K^+ is



27. (Currently Amended; Withdrawn): A compound according to claim 1, wherein K^+ is



28. (Currently Amended; Withdrawn): A compound according to claim 1, wherein K^+ is

